About the Conference

Auburn’s Civil Engineering Department and the Program Committee have designed the Sixtieth Annual Transportation Conference for federal and state highway personnel, road building contractors, general contractors, heavy construction contractors, utility contractors, county engineers, consulting engineers, construction material vendors, researchers, professional society representatives, and University faculty members. It provides an opportunity for these individuals to share innovative advances in transportation planning, engineering design, and construction. The conference presents technical presentations to provide a forum for the exchange of ideas within the highway engineering and construction professions. The sponsorship of the annual conference is indicative of the broad cross section of interest in the programs of this one and a half day continuing education event.

Location and Schedule

The conference will be held at the Renaissance Montgomery Hotel & Spa at The Convention Center, located at 201 Tallapoosa Street, Montgomery, Alabama. Final registration and check-in will be held from 8:30 a.m. to 10:30 a.m. in the Main Lobby on Thursday, February 9, 2017. The Opening General Session begins at 10:30 a.m. in the Performing Arts Center on the second floor. The conference will adjourn Friday afternoon, February 10, 2017.

Registration and Fee

All persons attending the conference must register. The registration fee of $200 includes all sessions, program materials, refreshment breaks, and luncheons. Additional luncheon tickets are available at the registration desk. Student and ALDOT retiree registration is $50. To register, please complete the attached registration form and return it by mail to the address indicated, by FAX (334) 844-5715, or by calling Engineering Continuing Education at (800) 446-0382 or (334) 844-4370. Online registration is available at www.engce.auburn.edu.

Accommodations

Participants are responsible for making their own lodging arrangements. A block of rooms have been reserved at the conference hotel. The room block is listed under “60th Transportation and Engineering Conference”. Rate: $136 plus taxes. Call (877) 545-0311.
Cancelation Policy

Due to commitments to our speakers and facilities, the registration fee is non-refundable if a registrant withdraws less than five business days before the program starts. Substitutions may be made at any time, please notify us in advance if possible. No-shows will be liable for the entire conference fee. Auburn University reserves the right to cancel any program due to insufficient registrations. This decision is usually made no later than five business days prior to the event. If a program is canceled for any reason, all fees will be refunded. Auburn University will not be responsible for travel expenses incurred by a registrant as the result of a canceled program.

Continuing Education

Participants in this conference will be able to attend up to eight (8) hours of technical programs. Auburn University makes every effort to ensure that its technical programs conform to the requirements of the State of Alabama Board of Licensure for Professional Engineers and Land Surveyors for the award of Professional Development Hours to support the annual renewal of professional licensure.

Participants with Disabilities

It is the policy of Auburn University to provide accessibility to its programs and reasonable accommodations for persons defined as having disabilities under the Americans with Disabilities Act of 1990. Please contact us at least two weeks prior to the program so that proper consideration can be given to any special needs.

Program Handouts

Handouts of the material presented at each session will be available for download approximately two weeks after the conference. Presentations can be downloaded by visiting the following website: http://www.alabamat2.org

Program Committee

Alabama Department of Transportation (ALDOT)

John R. Cooper  
Rex Bush  
Lamar Woodham  
Willie Bradley  
Stacey Glass  
Bob Jilla  
Ed Austin  
John Eagerton  
Robert Lee  
Michelle Owens  
Curtis Vincent  
Vince Calametti  
DeJarvis Leonard

Don Arkle  
George Conner  
William Adams  
Tim Colquett  
Scott George  
Steve Walker  
Tim Barnett  
Ed Phillips  
Skip Poe  
Maxine Wheeler  
Steve Graben  
James Brown

Auburn University

Brian Anderson  
Jeff LaMondia  
Larry Sellers  
Rod Turochy  
Hugo Zhou  
Garry Havron  
Justin Marshall  
Anton Schindler  
Wesley Zech  
Michael Heitzman

Federal Highway Administration

Mark Bartlett and Lewis Harden  
Montgomery, Alabama

Alabama Road Builders Association

Tom Layfield, Montgomery, Alabama

Alabama Asphalt Pavement Association

Mel Monk, Montgomery, Alabama

Alabama Concrete Industries Association

John Sorrell, Montgomery, Alabama

Alabama Section, ASCE

Alan Parker, Dothan, Alabama

Association of County Engineers of Alabama

David Palmer, Russellville, Alabama

Institute of Transportation Engineers, Alabama Section

Clark Bailey, Birmingham, Alabama

American Council of Engineering Companies of Alabama

Renée Casillas, Montgomery, Alabama

Bridge Construction Association of Alabama

Mark Seeley, Huntsville, Alabama

Alabama Concrete Pipe Association

Fred Crawford, Clanton, Alabama

2017 Conference Outline

Thursday, February 9, 2017

8:30 a.m.  Registration Opens

10:30 a.m.  Opening General Session – Performing Arts Center

Presiding: Dr. Anton Schindler, Professor and HRC Director, Department of Civil Engineering  
Auburn University, Auburn, AL

Opening Remarks

Innovation and Intelligence in Construction

Jason Kennedy  
Product Manager for Intelligent Machine Control, Komatsu America Corp., Cartersville, GA

Current and Future Economic Development in Alabama

Greg Canfield, Secretary of Commerce  
Alabama Department of Commerce, Montgomery, AL

12:10 p.m.  Governor’s Luncheon – Exhibit Hall C

Presiding: Dr. Steve Taylor, Assoc. Dean for Research  
Samuel Ginn College of Engineering  
Auburn University, Auburn, AL

The Honorable Robert Bentley, Governor (Invited)  
State of Alabama

1:30 p.m.  Concurrent Technical Sessions

3:00 p.m.  Break

3:30 p.m.  Concurrent Technical Sessions

5:00 p.m.  Adjourn

Friday, February 10, 2017

8:30 a.m.  Concurrent Technical Sessions

10:00 a.m.  Break

10:30 a.m.  Concurrent Technical Sessions

12:10 p.m.  Transportation Director’s Luncheon – Exhibit Hall C

Presiding: Dr. Andy Nowak, Chair and Professor  
Department of Civil Engineering  
Auburn University, Auburn, AL

John R. Cooper, Transportation Director  
Alabama Department of Transportation

1:30 p.m.  Adjourn

American Council of Engineering Companies of Alabama

Renée Casillas, Montgomery, Alabama

Bridge Construction Association of Alabama

Mark Seeley, Huntsville, Alabama

Alabama Concrete Pipe Association

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John R. Cooper, Transportation Director  
Alabama Department of Transportation

1:30 p.m.  Adjourn
Technical Sessions – Thursday, February 9, 2017

Traffic Operations and Roadway Design
Meeting Room: Alabama A

Presiding: Clark Bailey, President
Alabama Section ITE

1:30 p.m. Georgia Express Lanes: Get in, Get Going
Annie Gillespie
State Road and Tollway Authority, Atlanta, GA

2:00 p.m. Does Your Road Need to Go on a Diet?
Mark Doctor
FHWA, Atlanta, GA

2:30 p.m. AlgoTraffic 511
Chris Hilyer
ALDOT Maintenance Bureau, Montgomery, AL

Construction
Meeting Room: Alabama B

Presiding: Skip Powe, State Construction Engineer
ALDOT, Montgomery, AL

1:30 p.m. Birmingham CBD Project Overview
Lance Taylor and Gary Smith
ALDOT East Central Region, Hoover, AL

2:00 p.m. Cottage Hill Bridge Deck Replacement
Jason Shaw, ALDOT Southwest Region, Mobile, AL
Travis Tyler, McInnis Construction, Montgomery, AL

2:30 p.m. Overview of the Memorial Parkway in Huntsville
Derrick Wilson, ALDOT North Region, Huntsville, AL
David Harris, Reed Contracting, Huntsville, AL

Innovative SHRP2 Tools for Asphalt
Meeting Room: Alabama CDE

Presiding: Lyndi Davis Blackburn, Assistant State Materials & Tests Engineer, ALDOT, Montgomery, AL

1:30 p.m. Quality Control Behind the Paver Using IR Technology
Daniel Oesch
Missouri Department of Transportation, Jefferson City, MO

2:00 p.m. Improve Pavement Rehab Decisions with GPR Technology
Ken Masler, Ph.D.
Infrasense Inc., Arlington, MA

2:30 p.m. Classifying RAP and RAS with FTIR Technology
Torey Bell
ALDOT, Montgomery, AL

Highway Safety
Meeting Room: Alabama A

Presiding: David Palmer, President
Association of County Engineers of Alabama

3:30 p.m. Smart Work Zone Applications
Susan Soucie
New Hampshire Dept. of Transportation, Concord, NH

4:00 p.m. Understanding and Preventing Distracted Driving Behavior
Despina Stavrinou, Ph.D., Department of Psychology,
University of Alabama at Birmingham, Birmingham, AL

4:30 p.m. Drowsy Driving Advisory Systems in Alabama
Min-Wook Kang, Ph.D., Department of Civil Engineering,
University of South Alabama, Mobile, AL

Bridges
Meeting Room: Alabama B

Presiding: Tim Colquitt, State Bridge Engineer
ALDOT, Montgomery, AL

3:30 p.m. Tennessee DOTs Fast Fix 8 Bridge Rehabilitation
Ted Kniawezycz
Gresham Smith and Partners, Nashville, TN

4:00 p.m. Overview and Examples of Segmental Bridge Construction
Eric C. Johnson
Corven Engineering, Tallahassee, FL

4:30 p.m. I-10 Mobile River Bridge and Bayway Widening
Steven M. Flukinger
Thompson Engineering, Mobile, AL

Stretch Performance with Preservation
Meeting Room: Alabama CDE

Presiding: Mark T. Waits, Assistant Bureau Chief
Maintenance Bureau - Roadways, ALDOT, Montgomery, AL

3:30 p.m. NCAT Pavement Preservation Studies Update
Adriana Vargas, Ph.D.
National Center for Asphalt Technology, Auburn, AL

4:00 p.m. Best Practices for Thin Lift Asphalt Construction
Shane Buchanan, Ph.D.
Oldcastle Materials, Birmingham, AL

4:30 p.m. Right Pavement, Right Treatment, Right Time
Richie Beyer
Elmore County Engineering Office, Wetumpka, AL

Technical Sessions – Friday, February 10, 2017

Advancements in Geotechnical Engineering
Meeting Room: Alabama A

Presiding: Kaye Chancellor Davis, State Geotechnical Engineer
ALDOT, Montgomery, AL

8:30 a.m. Evaluation of Remediation Strategies for Shrink-Swell Clays in Western Alabama - The AL5 Project
J. Brian Anderson, Ph.D.
Department of Civil Engineering, Auburn University, AL

9:00 a.m. Use of Micropiles on the Birmingham CBD Project
Stephen M. Revell
ALDOT Bureau of Materials & Tests, Montgomery, AL

9:30 a.m. New Methods in Direct Push Geotechnical Testing
Roger A. Faimerger
In-situ Soil Testing, L.C., Lancaster, VA

Transportation Planning
Meeting Room: Alabama B

Presiding: Alan Parker, President
Alabama ASCE Section

8:30 a.m. Federal Funds, Local Funds, or Do Nothing? - Project Feasibility Studies
Scott Tillman and Mike Kaczorowski
Regional Planning Commission of Greater Birmingham, Birmingham, AL

9:00 a.m. Huntsville’s Complete Streets Initiative
Dennis Madsen
City of Huntsville, Huntsville, AL

9:30 a.m. Mobile’s Updated Congestion Management Process
Kevin Harrison
South Alabama Regional Planning Commission, Mobile, AL

Are We Ready for Innovative Technology?
Meeting Room: Performing Arts Center

Presiding: Mark Bartlett, Division Administrator
Alabama FHWA, Montgomery, AL

8:30 a.m. UAS/UAV Uses for State DOTs and ROI
Jagannath Mallela
WSP | Parsons Brinckerhoff, Washington, DC

9:00 a.m. Understanding the Travel Behavior Impacts of Automated Vehicles (AV)
Johanna Zmud, Ph.D.
Texas Transportation Institute, Washington, DC

9:30 a.m. State DOT Policies and Logistics to Support AVs
Collin Castle
Michigan Department of Transportation, Lansing, MI
Parking

1. **Hotel: Renaissance Montgomery Hotel and Spa Parking Deck**
   The Renaissance Montgomery Hotel and Spa at the Convention Center occupies the entire block bordered by Tallapooisa Street (front), Commerce Street, Moulton Street and Bibb Street. Parking deck entrance is from the Bibb Street side of the hotel. There are 600 parking places (including valet). Parking deck entrances are into the hotel second floor and the Convention Center first and second floor. The elevators are different and marked.
   - Rates:
     - Self Park: 0:30 min. Free; Up to 2 hrs. - $3.00; 2 to 6 hours $6.00; 6 to 10 hours $10.00; Overnight $10.00
     - Valet Parking: 0 to 10 hours $10.00; Overnight $16.00

2. **MATS Parking Deck**
   Located at the corner of Moulton and Bell Street. Hours & Rates:
   - Monday-Friday 6:30 a.m. to 6:00 p.m. - $1.00 per hour.
   - Monday-Friday 6:30 p.m. to 6:00 a.m. - no charge.
   - Friday 6:00 p.m. to Monday 6:30 p.m. (Weekends) – no charge.
   - MATS (Montgomery Area Transportation System) 334-241-2203

3. **Biscuits / Riverwalk Stadium Parking**
   Open daily with no attendant and no charge
   - Game Days: $4.00
   - Operated by the Montgomery Kiwanis Club (334-834-7929)

4. **Park-ette Parking Area 334-265-7215**
   Located across Bibb Street between Lee and Commerce.
   - Private Parking during the week
   - Free Parking after 6:00 pm Friday through 6:00 pm Sunday
   - Please note: the permit only lot behind southeast of this lot is not available without a permit 24 hours per day, seven days a week.

5. **Embassy Suites Hotel**
   Located across Tallapooisa Street from the Renaissance Hotel.
   - Rates: $5.00 per day.
   - Parking charges apply based on demand.

6. **Montgomery Chamber of Commerce Visitors Bureau**
   Located off Water Street under the train station.
   - Monday - Friday 6:00 a.m. to 5:00 p.m. parking with a permit only.
   - No charge to park evenings and weekends.

7. **Commerce Street / Tallapooisa Street Lot**
   Located across from the front entrance to the hotel at the Northwest corner of Tallapoosa and Commerce Streets.
   - Rates: Monday - Friday 6:00 a.m. to 5:00 p.m. parking with a permit only.
   - No charge to park evenings and weekends.

8. **Street Parking:**
   Metered Parking Spaces:
   - Meters apply Monday through Friday from 8:00 a.m. to 6:00 p.m.
   - No charge for Evenings, Weekends and Holidays.
   - Non-Metered Parking Spaces:
     - Non-metered diagonal spaces and median spaces (on Commerce Street between Tallapoosa and Montgomery Streets)
     - No restrictions or charges for parking at this time.

**Please Note:**
Due to the rapidly developing renovation projects throughout downtown Montgomery, there may be changes to this information that are beyond our control.

**Renaissance Montgomery Hotel and Spa at the Convention Center**
**February 9-10, 2017**
**ON LINE REGISTRATION AT: www.engineer.auburn.edu**

**Sixtieth Annual Transportation Conference**
Renaissance Montgomery Hotel and Spa at the Convention Center
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**Concrete Solutions**
Meeting Room: Alabama A
Presiding: Steven Ingram, Testing Engineer, Bureau of Materials and Tests, ALDOT, Montgomery, AL
10:30 a.m. New Techniques for Controlling Mixed In-Place Soil Cement Road Base
Isaac Howard, Ph.D., Dept. of Civil and Environmental Engineering, Mississippi State University, Starkville, MS
11:00 a.m. Use of Manufactured Sand in Concrete Mixtures and Applications in Transportation
Robin E. Graves, Ph.D. Vulcan Materials Company, Birmingham, AL
11:30 a.m. Requirements for Mass Concrete Construction in Alabama
Anton Schindler, Ph.D. ALDOT, Montgomery, AL
11:30 a.m. The Junction of Stormwater and Transportation: Green Infrastructure
Eve Brantley, Ph.D. Infrastructure for the Future

**New Stormwater Ideas to "Runoff" With**
Meeting Room: Alabama B
Presiding: Wade Henry, Assistant Bureau Chief - Preliminary Engineering Division, ALDOT, Montgomery, AL
10:30 a.m. The Future of Transportation Stormwater and a New TRB Opportunity
Scott Taylor Michael Baker International, Inc., Carlsbad, CA
11:00 a.m. Streamlining Environmental Planning
Marlo Clowers Georgia Department of Transportation, Sandy Springs, GA
11:30 a.m. The Junction of Stormwater and Transportation: Green Infrastructure
Eve Brantley, Ph.D. Crop, Soil, and Environmental Sciences, Auburn University, AL

**Maintenance**
Meeting Room: Alabama CDE
Presiding: Stacey Glass, State Maintenance Engineer ALDOT, Montgomery, AL
10:30 a.m. Analysis of Alabama Transportation Performance Measures
Paul Carter ALDOT Maintenance Bureau, Montgomery, AL
11:00 a.m. December 2015 Flooding in Alabama
Jim Bearrentine ALDOT Maintenance Bureau, Montgomery, AL
11:30 a.m. Federal Perspective on Hydraulic Engineering
Brian Beucler Federal Highway Administration, Washington, D.C.